REMARKS

Claims 1-4 and 7-11 are pending herein.

I. The amendments may be permissibly entered under 37 C.F.R. § 1.116.

Applicants are respectfully aware of the limitations placed on amendments after final rejection. Applicants respectfully note that the amendments to claim 1 incorporate the limitations of claim 6 into claim 1 (i.e., lines 21-24 of claim 1 above), and partially incorporate the limitations of claim 8 into claim 1 (i.e., lines 14-15 of claim 1 above). Applicants further respectfully assert that the amendments at lines 16-18 of claim 1 are relatively minor in scope and help to place the application in condition for allowance. Therefore, it is respectfully asserted that no new search is required and the amendments may therefore be permissibly entered under 37 C.F.R. § 1.116.

II. The obviousness rejections based on the combination of Moore (US 5,683,518) and Ushikoshi (US 5,683,606).

The USPTO respectfully rejects claims 1-4 and 6-8 under 35 U.S.C. § 103(a) as being unpatentable based on Moore in view of Ushikoshi. Claim 1 is an independent claim. Claim 6 has been cancelled.

A. The cited references do not teach or suggest a partition plate positioned lower than an inlet of the annealing gas introducing unit and higher than inlets of the reactive gas supply unit, the source gas supply unit, and the purge gas supply unit, as claimed in claim 1.

Claim 1 claims in relevant part:

> "**a partition plate** positioned lower than an inlet of the annealing gas introducing unit and higher than inlets of the reactive gas supply unit, the source gas supply unit, and the purge gas supply unit;" **(emphasis added)**

No new matter is added by the amendments. Support for the amendments is found in present Figure 10 and on pages 26-27 of the present specification. Regarding these limitations, it is

respectfully not seen where the cited references teach or suggest the claimed structure quoted above.

Specifically, the USPTO respectfully alleges on page 4 of the Office Action that Moore teaches the specifically claimed gas supply units of claim 1 at elements 314a and 314b of Figure 3B of Moore. Additionally, the USPTO respectfully alleges on pages 4-5 of the Office Action that column 30, lines 47-52 of Moore teaches that 2-10 gas injection jets can be used. Also, regarding claim 6, the USPTO respectfully alleges on page 7 of the Office Action that Moore teaches an annealing gas introducing unit at elements 408a, 414 of Figure 4B of Moore.

However, it is respectfully asserted that **Moore does not teach or suggest a partition plate that is positioned lower than the alleged inlet of the annealing gas introducing unit of Moore** (i.e., element 414 in Figure 4B of Moore), as claimed in claim 1. For example, Figure 4B of Moore, and the related portions of the specification of Moore, do not teach or suggest anything about a partition plate.

Additionally, it is respectfully asserted that **Moore does not teach or suggest a partition plate that is positioned higher than the alleged gas inlets 314a and 314b of Moore.** For example, Figure 3B of Moore also does not show any partition plate structure, as specifically claimed in claim 1.

Also, there is no "common sense" reason to modify Moore to position a partition plate lower than an inlet of the alleged annealing gas introducing unit 414. For example, as seen in Figure 4B of Moore, if a partition plate was positioned lower than alleged annealing gas introducing unit 414 and higher than gas injection jets 421a, then the alleged annealing gas introducing unit 414 would be completely isolated from the wafers positioned in susceptor 402. In other words, **if Moore was modified to include a partition plate as claimed in claim 1, any annealing gas from alleged annealing gas introducing unit 414 would never reach the wafers on susceptor 402.** Thus, it would not make technical sense to completely isolate the alleged annealing gas introducing unit 414 from the wafers being processed, and therefore there is no "common sense" reason to modify Moore to teach or suggest the specifically claimed partition plate of claim 1.

Furthermore, it is respectfully asserted that Ushikoshi does not overcome these deficiencies in the primary reference Moore. For example, Ushikoshi is only cited as allegedly teaching a heater formed on a substrate holding surface of the substrate holding unit. Additionally, it is respectfully asserted that **Ushikoshi only allegedly relates to ceramic heaters, and does not teach or suggest anything about the specifically claimed partition plate, as claimed in claim 1.**

In contrast, present Figure 10 illustrates one possible embodiment of the claimed structure quoted above. For example, present Figure 10 shows a partition plate 264. **Partition plate 264 is positioned lower than the inlet for the annealing gas, and positioned higher than the inlets of the reactive gas, source gas, and purge gas**, as clearly seen in present Figure 10 (see also pages 26-27 of the present specification. Thus, partition plate 264 is one possible embodiment of the specifically claimed partition plate of claim 1.

The difference noted above is important and non-trivial because it provides significant advantages over conventional structures. For example, in a device according to claim 1 (see present Figure 10 for one possible example), the quartz cover 258, supporting unit 214, Si wafer 206 and partition plate 264 form a division wall when the wafer has been moved up. As a result, the annealing gas is only supplied to and exhausted from the small chamber above the partition plate 264, while the flow of the annealing gas into the chamber below the partition plate 264 is blocked. Consequently, **erosion of the inner walls of the deposition chamber, ascribable to the contact of the annealing gas and the reactive gas in the deposition chamber, can be suitably suppressed.**

Thus, it is respectfully asserted that the cited references, taken either alone or in combination, do not teach or suggest all of the limitations of claim 1. Therefore, it is respectfully asserted that claim 1 is allowable over the cited references.

B. Further explanation.

Applicants respectfully note the following further explanation regarding claim 1.

The USPTO respectfully alleges that the source gas supply unit, the reactive gas supply unit, and the purge gas supply unit of claim 1 correspond to the injection jets disclosed

in Moore (see pages 4-5 of the Office Action). However, the gas injection jets 421 in Moore are provided for accomplishment of a desired gas flow (see column 30, lines 49-51 of Moore, for example). Therefore, Applicants respectfully assert that the identical gas is supplied from the gas injection jets 421, even if many gas injection jets are provided. Consequently, each specifically claimed gas supply unit in claim 1 does not correspond to each gas injection jet of Moore.

C. The dependent claims.

As noted above, it is respectfully asserted that independent claim 1 is allowable, and therefore it is further respectfully asserted that dependent claims 2-4 and 7-8 are also allowable.

III. The obviousness rejections of claims 9-11 based on the combination of Moore and Ushikoshi, in view of Suflarto (US 6,395,092) and Kusuda (US 2002/0195437).

As noted above, it is respectfully asserted that independent claim 1 is allowable, and it is further respectfully asserted that Suflarto and Kusuda do not overcome these deficiencies in Moore and Ushikoshi. Therefore it is further respectfully asserted that dependent claims 9-11 are also allowable.

IV. Conclusion.

Reconsideration and allowance of all of the claims is respectfully requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Please contact the undersigned for any reason. Applicants seek to cooperate with the Examiner including via telephone if convenient for the Examiner.

Respectfully submitted,

CANTOR COLBURN LLP

By /Daniel P. Lent/
Daniel P. Lent
Registration No. 44,867

Date: November 13, 2007
CANTOR COLBURN LLP
55 Griffin Road South
Bloomfield, CT 06002
Telephone (860) 286-2929
Facsimile (860) 286-0115
Customer No.: 23413